IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 9, and 14-18 in accordance with the following:

1. (Currently Amended)   An object interaction expression apparatus for expressing interactions between plural objects that move by simulation in a virtual space, comprising:

an expression mode storing unit that stores in a correlated form an interaction magnitude of an object and a corresponding expression mode in which the interaction magnitude will be expressed;

an interaction magnitude calculating unit that calculates interaction magnitudes of objects that interact with each other; ~~and~~

an expression controller that controls an expression of the interaction magnitude of the objects that interact with each other based on the expression mode stored corresponding to the interaction magnitude calculated~~.~~; and

an interaction magnitude providing unit that provides controlled expression of the interaction magnitude of the objects for the user.

2. (Original)   The object interaction expression apparatus according to claim 1, wherein the interaction magnitude calculating unit calculates the interaction magnitude from a distance between the objects.

3. (Original)   The object interaction expression apparatus according to claim 2, wherein the interaction between the objects is collision, and the interaction magnitude calculating unit calculates the interaction magnitude from the distance between the objects after an elastic deformation of the objects.

4. (Original) The object interaction expression apparatus according to claim 2, wherein the interaction between the objects is collision, and the interaction magnitude calculating unit calculates the interaction magnitude from the distance between the objects after a plastic deformation of the objects.

5. (Original) The object interaction expression apparatus according to claim 1, wherein the interaction between the objects is collision, and the interaction magnitude calculating unit calculates the interaction magnitude in terms of a denting amount.

6. (Original) The object interaction expression apparatus according to claim 1, wherein the expression mode storing unit stores as correlated expression modes visual mode, and one or both of aural and tactile expression modes.

7. (Original) The object interaction expression apparatus according to claim 4, wherein the interaction between the objects is collision, and the expression mode storing unit stores pre-collision and post-collision interaction magnitudes by correlating the interaction magnitudes with the expression mode expressed by changing colors, and the interaction magnitudes during collision by correlating the interaction magnitudes with the expression modes expressed by one or more of impact waveform, impact wave animation, color, impact sound, and vibrations.

8. (Original) The object interaction expression apparatus according to claim 1, wherein the objects are constituent elements of a product, and the expression modes that express the interaction magnitude constitute modes comprehensible by a designer of the product.

9. (Currently Amended) A method for expressing interactions between plural objects that move by simulation in a virtual space, comprising the steps of:

storing in a correlated form an interaction magnitude of an object and a corresponding expression mode in which the interaction magnitude will be expressed;

calculating interaction magnitudes of objects that interact with each other; and

controlling an expression of the interaction magnitude of the objects that interact with each other based on the expression mode stored corresponding to the interaction magnitude calculated-; and

providing controlled expression of the interaction of the objects for the user.

10. (Original)   The method according to claim 9, wherein the calculating includes calculating the interaction magnitude from a distance between the objects.

11. (Original)   The method according to claim 10, wherein the interaction between the objects is collision, and the calculating includes calculating the interaction magnitude from the distance between the objects after an elastic deformation of the objects.

12. (Original)   The method according to claim 9, wherein the storing includes storing as correlated expression modes visual mode, and one or both of aural and tactile expression modes.

13. (Original)   The method according to claim 12, wherein the interaction between the objects is collision, and the storing includes storing pre-collision and post-collision interaction magnitudes by correlating the interaction magnitudes with the expression mode expressed by changing colors, and the interaction magnitudes during collision by correlating the interaction magnitudes with the expression modes expressed by one or more of impact waveform, impact wave animation, color, impact sound, and vibrations.

14. (Currently Amended)   ~~A computer program that makes a computer execute:~~ A computer-readable medium that stores a computer program that contains computer-executable instructions for causing a computer to execute a method for expressing interactions between plural objects that move by simulation in a virtual space, the method comprising the steps of:
storing in a correlated form an interaction magnitude of an object and a corresponding expression mode in which the interaction magnitude will be expressed;
calculating interaction magnitudes of objects that interact with each other; and
controlling an expression of the interaction magnitude of the objects that interact with each other based on the expression mode stored corresponding to the interaction magnitude calculated~~.~~; and
providing controlled expression of the interaction magnitude of the objects for the user.

15. (Currently Amended)   The ~~computer program~~ computer-readable medium according to claim 14, wherein the calculating includes calculating the interaction magnitude from a distance between the objects.

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16. (Currently Amended)   The ~~computer program~~ computer-readable medium according to claim 15, wherein the interaction between the objects is collision, and the calculating includes calculating the interaction magnitude from the distance between the objects after an elastic deformation of the objects.

17. (Currently Amended)   The ~~computer program~~ computer-readable medium according to claim 14, wherein the storing includes storing as correlated expression modes visual mode, and one or both of aural and tactile expression modes.

18. (Currently Amended)   The ~~computer program~~ computer-readable medium according to claim 17, wherein the interaction between the objects is collision, and the storing includes storing pre-collision and post-collision interaction magnitudes by correlating the interaction magnitudes with the expression mode expressed by changing colors, and the interaction magnitudes during collision by correlating the interaction magnitudes with the expression modes expressed by one or more of impact waveform, impact wave animation, color, impact sound, and vibrations.